## Field identification of Little and Saunders's Tern

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**Résumé:** La séparation sur le terrain des sternes, particulièrement des espèces superficiellement similaires, peut s'avérer ardue même pour les observateurs les plus expérimentés. Les similarietés nombreuses entre certaines espèces, combinées au défi peut-être impossible de séparer les plumages des oiseaux n'étant pas en période de reproduction, résultent souvent dans le fait qu'elles sont consignées dans les carnets de notes simplement sous forme d'"espèces de sternes" ou purement et simplement omises. Le présent article, adapté exclusivement pour ABC du nouveau guide *Terns of Europe and North America* (Helm) traite de l'un des plus grands problèmes qui se pose aux observateurs en Afrique, l'identification sur le terrain de la Sterne de Saunders et des Sternes naines.

The field separation of terns, especially superficially similar species can prove taxing to even the most experienced birders. The numerous similarities between certain species, compounded by the perhaps impossible challenge of separating some non-breeding plumages, often leads to notebook absences or the common entry 'tern sp'.

The following text, adapted exclusively for ABC from the award-winning new guide *Terns of Europe and North America* (Helm) deals with a most likely problem facing birders in Africa: the field identification of Saunders's *Sterna saundersi* and Little Tern *S. albifrons*.

# Little Tern Sterna albifrons Identification in the field

Little, Least *S. artillarum* and Saunders's Terns are the smallest terns. The Little Tern is only the size of a Ringed Plover *Charadrius biaticula*, and in shape resembles half-sized Sandwich Tern *S. sandvicensis*. The Little Tern gives the impression of a small, white, over-active and almost aggressive coastal bird which flies fast and purposefully. In the breeding season it also shows periods of slower, elegant flight.

The Little Tern hovers at a few metres' height with downward-pointing bill and plunge-dives directly towards the water's surface, rising again after a few seconds. It usually forages over shallow water near the shoreline, but sometimes several hundred metres out, where it may hover at heights of up to 10m.

The Little Tern is large-headed, with a long and narrow bill about the same length as the head. The pointed wings, especially seen against the light, appear narrow with the remiges (except the dark outer-primaries) translucent. The arm and hand on a bird in active flight are almost uniform in width. The body is streamlined and slender, with no obvious centre of gravity. The tail is shorter than that of other native terns, especially when seen against a light

background, when the tail streamers disappear. During the northern summer, the tail length has been estimated at 1.2-1.5 times the breadth of the wings at their base.

Perched birds are short-legged and compact, with flat head drawn down between the shoulders and the long bill held horizontally.

The Little Tern is very characteristic. Great difficulties arise, however, when separating the closely related species (races?), Saunders's and Least Terns. Identification in winter and immature plumages is not normally possible even in the hand.

**Adults in summer plumage** have a black cap and white forehead, the latter narrowing gradually in a triangle towards the eye.

The loral stripe is black, broadest on males, on which it gradually becomes broader towards the eye. The yellow bill has a black tip and looks like a matchstick stuck onto the head. The upperparts are pale blue-grey with outer most 1-3 primaries forming a distinct black leading edge to the wing. The rump is paler grey and the tail pure white. The legs are yellow to orange-yellow. From July-August the inner primaries are moulted and elements of white appear in the crown. The bill can darken from August.

Adults in winter plumage have a dull black, grey-spotted mask which is diffusely demarcated from the white-flecked crown. The black spot in front of eye stands out against the white lores and face. The upperparts are much as in summer plumage, but lesser coverts become darker and the tail greyer. The wing markings depend much on the degree of wear and moult. In midwinter the bill is black. The legs are grey or brown, sometimes tinged yellow.

Juveniles are smaller and more compact than adults, with more rounded wingtips; in the period immediately after fledging they recall a pale-winged Ringed Plover, as they have a more uncertain and flapping flight than adults. In plumage they are rather like

juvenile Sandwich and Roseate Terns Sterna dougallii. The upperparts are tricoloured, with a darker leading edge to the wing (lesser coverts and outer primaries), pale grey or yellow-brown mantle/back and coverts and white secondaries and inner primaries. The mantle/back has black V markings, which as early as late summer, are replaced by pure grey feathers. The rump and central tail feathers are grey, with white outer tail feathers. Dark tips to the tail feathers can form a faint dark band.

The forehead and crown initially have a yellowish-brown to cinnamon-brown tinge, but soon (from July-September) become white. Looking from the central crown backwards, grey-brown streaks merge into the dark, very narrow facial mask. At close range the big eye is clearly accentuated by a white eye-ring, but at a distance they become one with a black triangle from in front of the eye. The underparts are white, sometimes with a faint brown-toned Black Tern *Chlidonias niger* like patch as on the breast sides.

The bill is brownish-black, with a variable paler yellowish base or edges after fledging. The legs are greyish-yellow, sometimes orange toned.

#### Voice

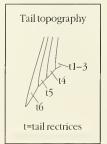
Harsh; a monosyllabic *ket* or *ket-ket*, or *kweek*, which is heard frequently from foraging birds. Often uttered as a double note.

## Geographical variation

Race *guineae* (West Africa) is generally smaller than nominate race and the bill is more commonly wholly yellow. Rump and tail often grey, t6 white. The tail can be darker grey than on Saunders's Tern. Some are inseparable from nominate; validity of the race possibly dubious. Populations from the Persian Gulf often have grey rump and tail.

Race *sinensis* (including *pusilla*) (India and east Asia) has grey rump and t1-3, and may show white rump/tail (especially eastern populations); t4-5 white, often with grey tinge to outer webs and outer part; t6 white (grey on fewer than 1%). The bill is yellow with up to 6 mm of black at tip. Unlike other races, *sinensis* shows whitish primary shafts. The tail streamers are generally longer than on Saunders's Tern, being up to

68 mm. Many are intermediate between Little and Saunders's, having Little Tern's head markings but with a grey rump and tail. In structure and size, sinensis seems close to Fairy Tern S. nereis of Australasia and Yellow-billed Tern S. superciliaris of South America. The populations from Australia



## Little Tern Quick key to identification

- 1 Only half the size of other terns.
- 2 Forehead white in all plumages, extending very narrowly to behind eye.
- 3 Bill yellow with black tip
- 4 Tail and rump white, sometimes tinged grey, especially on t1-3; t5-6 normally white (see Saunders's).
- 5 White rump contrasts with grey back and any grey tail feathers.
- 6 In breeding season, 2-3 outer primaries are blackish-grey contrasting with grey of rest of upperwing.
- 7 Juveniles and first-winters resemble half-sized Sandwich Terns

and east Asia have a white rump and tail (much as nominate *albifrons*).

## Saunders's Tern Sterna saundersi Identification in the field

This species is very like the Little Tern, and there is still great uncertainty surrounding its true status as a species. Many intermediates occur and only those with a combination of all characters can be identified with certainty in the field - and only in adult summer plumage. Where Saunders's breeds together with Little Tern, it prefers saltwater whereas Little breeds inland in these situations.

In **adult summer plumage** the most important differences from Little Tern are:

1 the white forehead patch extends only to the eye, where it is rounded off or square-cut. Saunders's Tern lacks Little's suggestion of a white supercilium. The distance from the bill base to the rear edge of the forehead patch above the eye is 9-14 mm (on Little it is 15-20 mm). There is up to 3 mm of black between the eye and the rear edge of the forehead patch; the patch normally reaches to the eye on Little, or only 1 mm above. The black loral stripe is 3-6 mm broad in front of the eye, broadest on males (normally 3-4 mm on Little). See illustrations.

2 the legs are reddish-brown to mid-brown and average shorter than on Little Tern.

3 the upperparts are pale grey, much as on adult Roseate Tern, and are concolorous with the rump and tail. Contrast between the back and the rump/tail is generally lacking. Little Tern has a paler rump contrasting with a darker back. The value of this feature is diminished by the fact that those Little Terns breeding within the range of Saunders's often have the central part of the tail grey. However, the rump is normally paler and stands out more clearly against Little's darker

## Saunders's Tern Quick key to identification

- 1 Forehead patch smaller, ending in rounded or square-cut rear edge in front of eye
- 2 Upperparts paler grey than on Little Tern. No obvious contrast between back and rump/tail.
- 3 Rump and most of the tail pale grey; only t6 is predominantly white.
- 4 Legs darker, with brown tone.
- 5 Outermost 3 primaries deeper black than on Little Tern, with black shafts. Contrast accenuated by paler upperparts than on Little.
- 6 Tail streamers never as long as on long-tailed Little Terns.

grey upperparts. Furthermore, Little Terns normally show paler bases to their grey rump feathers, which may give a mottled appearance to the rump. On Saunders's, the rump is pale grey and the tail pale grey; t1-4 pale grey, t6 white. In fresh plumage, the

rump and uppertail-coverts have white edges and appear whiter.

4 The tail streamers are generally shorter and never as long as on long-tailed Little Terns.

A much-debated character is that the outer three primaries are black (including black shafts) and form a broader, and purer black leading edge to the outer wing than on most Little Terns, this being accentuated by a paler grey upperwing. This feature should, however, be used with caution owing to Little Tern's moult pattern. Birds studied in East Africa in winter did, nevertheless, appear to have more black on the outermost primaries (normally 3-4 outer primaries black) than Little Terns. Beware, however, moulting Little Terns with up to 6-7 inner primaries moulted and contrasting with 3-4 outer unmoulted and darker ones, though Little Terns normally show paler shafts.

**Adult winter plumage** is almost identical to that of Little. The upperparts are darker grey than in breeding



Little Tern: adult male summer (top left). Note pointed extensions of white forehead to just over eye, and white rump. Spain, June (Karel Beylevelt).

Sterne naine: adulte mâle, été (en haut, à gauche). Notez l'extension pointue du front blanc jusque juste au dessus de l'oeil et le croupion blanc. Espagne, juin (Karel Beylevelt).

Little Tern: adult summer (bottom left). Note two dark outer primaries and white rump. Note oil pollution causes unusual wing markings. Israel, April 1994 (Klaus Malling Olsen).

Sterne naine: adulte, été (en bas, à gauche). Notez les deux rémiges primaire extérieurs foncés et le croupion blanc. La pollution par le pétrole cause des taches inbabiteulles sur les ailes. Israel, avril 1994 (Klaus Malling Olsen).

Saunders's Tern: adult summer (top right). Compare shape of white forehead with that of Little and Least Terns, not reaching eye. In summer plumage, upperparts paler pearly-grey than on Little Tern, uniform with rump and central pair of tail feathers. Oman, May 1993 (Hans and Jens Eriksen).

Sterne de Saunders: adulte, été (en haut, à droite). Comparez la forme du front blanc avec celle des Sternes naine et des Petites Sternes, n'arrivant pas à l'oeil. Dans le plumage d'été, les parties supérieures sont gris perle plus pâle que chez la Sterne naine, uniforme avec le croupion et la paire centrale de pennes rectrices. Oman, mai 1993 (Hans et Jens Ericksen).







Saunders's Tern: winter plumage (bottom right). Note grey centres of rump and tail in contrast to white sides of rump. In winter plumage averages darker than Little Tern (opposite to summer plumage). Bahrain, autumn 1990 (Erik Hirschfeld).

Sterne de Saunders: plumage d'hiver (en bas, à droite). Notez le centre gris du croupion et de las queue en contraste avec les côtes blancs du croupion. Dans le plumage d'hiver les individus sont en moyenne plus foncés que la Sterne naine (contrairement au plumage d'été!). Babrein, automne 1990 (Erik Hirschfeld).

season, and can be darker than on Little (Hollom et al 1987). The uniform grey rump and back are difficult features to use in the field, as many Little Terns within Saunders's range have an equally grey rump and tail (see above). The black mask is generally broader than on Little (so mirrors the head pattern of summer plumage). The crown to nape is dark.

**Juvenile** Probably identical with Little Tern. Some (Bahrain) have, however, shown a darker bar on secondaries.

#### Voice

A *kit-kit* or *kit-ir-kit*, as Little Tern's but possibly less sharp than latter's.

### Geographical variation

Birds from the Persian Gulf and Arabia are on average longer-winged than those from Pakistan and East

#### Plate 1 (top)

Little Tern *Sterna albifrons*, Saunders's Tern *S. (a.) saundersi* and Least Tern *S. (a.) antiltarum*.

- 1 Little Tern, juvenile.
- 2 Little Tern, adult winter/first summer.
- 3 Little Tern, adult summer. White frontal patch triangular, frequently reaching just behind the eye.
- 4 Least Tern, adult summer. Head pattern identical to that of Little Tern.
- 5 Saunders's Tern, adult summer. White frontal patch shorter and squarer than on Little Tern, not reaching behind eye.

#### Plate 2 (bottom)

- Little Tern, juvenile. Superficially like Sandwich Tern in miniature. Typical individual with whitish secondaries and scaled upperparts.
- 2 Little Tern, juvenile moulting into first-winter. From late summer, upperside is a mixture of juvenile and uniform pale grey feathers. Note: individuals with dark secondaries are not infrequent, although they may occur relatively more frequently among Saunders's Tern. More research is needed.
- 3 First-winter/adult winter. Most are inseparable after December-January. First-summers retain winter plumage.
- 4 Little Tern, adult summer. Note white forehead patch, narrowing behind eye, and white rump.
- 5 Little Tern, adult summer. Characteristic, with long and slender yellow bill with dark tip, pale grey upperparts, and narrow dark line on leading edge of wing created by worn outer (1)2-3 primaries. White rump and tail positively identify this individual as Little Tern albifrons, but individuals with greyish tinge to rump and middle parts of tail occur. These areas are rarely concolorous with back, as bases of rump feathers normally are whiter (see Saunders's and Least Terns)
- 6 Least Tern, adult summer.
- 7 Saunders's Tern, adult summer. Typical individuals may be identified by a combination of shorter (rounded) white frontal patch, not reaching behind eye, paler and uniform grey upperparts and blacker (broader) area on primaries than on Little Tern. Many integrades occur in breeding areas of Saunders's Tern, making safe field identification very difficult.

Africa (Cramp 1985). Differences, however, are small and integrades do occur.

#### References

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- Hollom, P.A.D., Porter, R.F., Christensen, S. and Willis, I. 1987. The birds of the Middle East and North Africa. London: T.& A.D.Poyser.

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#### Illustration 1 (en haut)

Sterne naine Sterna albifrons, Sterne de Saunders S. (a.) saundersi et Petite Sterne S. (a.) antillarum.

- 1 Sterne naine, jeune.
- 2 Sterne naine, adulte, hiver/premier été.
- 3 Sterne naine, adulte, été. Tache frontale triangulaire blanche, arrivant fréquemment juste derrière l'oeil.
- 4 Petite Sterne, adulte, été. Dessin sur la tête identique à celui de la Sterne naine.
- 5 Sterne de Saunders, adulte, été. Tache frontale blanche plus courte et plus carrée que chez la Sterne naine, n'arrivant pas derrière l'oeil.

#### Illustration 2 (en bas)

- 1 Sterne naine, jeune. Ressemble superficiellement à la Sterne caugek en miniature. Individu typique avec rémiges secondaires blanchâtres et écailles sur les parties supérieures.
- 2 Sterne naine, jeune en mue pour premier hiver. A partir de la fin de l'été, le côté supérieur est un mélange de plumes juvéniles et de plumes gris pâle uniforme. Remarque: les individus avec des rémiges secondaires foncés ne sont pas infréquents, bien qu'ils soient relativement plus fréquents parmi la Sterne de Saunders. Plus de recherche est requise.
- 3 Premier hiver/adulte, hiver. La plupart sont inséparables après décembre-janvier. Les oiseaux dont c'est le premier été conservent leur plumage d'hiver.
- 4 Sterne naine, adulte, été. Notez la tache blanche sur le front se rétrécissant derrière l'oeit et le croupion blanc.
- 5 Sterne naine, adulte, été. Caractéristique avec un bec jaune long et mince à extrémité foncée, des parties supérieures gris pâle et une ligne foncée étroite sur le bord antérieur de l'aile créée par l'usure des rémiges primaires extérieures (1)2-3. Le croupion blanc et queue blanche permettent d'identifier positivement ce spécimen comme étant une Sterne naine albifrons mais il existe des spécimens avec un croupion et les parties moyennes de la queue à teinte grisâtre. Ces endroits ont rarement une couleur uniforme avec le dos puisque la base des plumes du croupion est normalement plus blanche (voir Sterne de Saunders et Petite Sterne).
- 6 Petite Sterne, adulte, été.
- 7 Sterne de Saunders, adulte, été. Les individus typiques peuvent être identifiés par une combinaison de tache frontale blanche plus courte (arrondie), n'arrivant pas derrière l'oeil, des parties supérieures d'un gris uniforme plus pâle et un endroit plus noir (plus large) sur les rémiges primaires que chez la Sterne naine. Beaucoup de gradations existent dans les régions de reproduction de la Sterne de Saunders, ce qui rend une identification précise sur le terrain très difficile.





Field ID of Little and Saunders's Terns: Olsen & Larssen